

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Attorney Docket № 14182US02)**

In the Application of:

Ed H. Frank, et al.

Serial No. 10/658,139

Electronically Filed on 08-DEC-2008

Filed: September 9, 2003

For: METHOD AND SYSTEM FOR
PROVIDING SEAMLESS
CONNECTIVITY AND
COMMUNICATION IN A MULTI-BAND
MULTI-PROTOCOL HYBRID
WIRED/WIRELESS NETWORK

Examiner: Hieu T. Hoang

Group Art Unit: 2152

Confirmation No. 3006

REPLY BRIEF

MS: APPEAL BRIEF-PATENTS
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 CFR 41.41, the Appellant submits this Reply Brief in response to the Examiner's Answer mailed on October 21, 2008. Claims 1-31 are pending in the present Application. The Appellant has responded to the Examiner in the Examiner's Answer, as found in the following Argument section.

As may be verified in his final Office Action (page 4), dated 4/3/2008, claims 11-20 stand rejected under 35 U.S.C. § 101 as the claimed invention is directed to non-statutory subject matter. Claims 1-7, 9-17, 19-27, and 29-31 stand rejected under 35 U.S.C. § 102(e) as being unpatentable by U.S. Patent No. 6,587,680, issued to Ala-Laurila, et al. (hereinafter, Laurila). Claims 8, 18, and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Laurila, as applied to claims 1, 11, and 21, in view of U.S. Patent No. 6,651,105, issued to Bhagwat, et al. (hereinafter, Bhagwat). To aid the Board in identifying corresponding arguments, the Appellant has used the same headings in the Argument section of this Reply Brief as the headings found in the Appellant's corresponding Brief on Appeal. The Brief on Appeal has a date of deposit of September 2, 2008.

STATUS OF THE CLAIMS

Claims 1-31 were finally rejected. Pending claims 1-31 are the subject of this appeal.

ARGUMENT

I. Rejection of Claims 11-20 under 35 U.S.C. § 101

The Applicant gratefully acknowledges the withdrawal of the rejection of claims 11-20 under 35 U.S.C. § 101.

II. Rejection Under 35 U.S.C. § 102

The Appellant stands by all the argument made in the corresponding section of the Brief on Appeal.

A. Claims 1, 11, and 21

In response to Appellant's argument stated in pages 9-15 of Brief on Appeal, the Examiner states the following in pages 7-8 of the Examiner's Answer:

Applicant argues that Laurila's security associations (SAs) are not related to initial authentication of a mobile device with a first access point. The examiner respectfully disagrees. Laurila clearly discloses security associations are authentication keys used in initial authentication of the mobile device with the first access point (AP) (old AP before the handover) (col. 8 lines 17-20, fig. 2, col. 5 lines 43-50, AP old 14 and mobile terminal 12 have authentication keys or SAs).

Furthermore, the claims (such as claim 1) recite "authentication information related to said initial authentication." Therefore, **security associations or authentication keys can be read as authentication information related to said initial authentication.**

Applicant argues that Laurila must require new authentication at each new access point. The examiner respectfully disagrees. This argument is irrelevant to the claimed subject matter. The claim language makes no distinction between whether new access point have to or does not have to authenticate the mobile device, and/or whether more processing is done to the initial authentication information or not before servicing the device. The claim merely recites "servicing said access device by one of

said first access point, said second access point and said third access point based on said initial authentication." The fact is that Laurila's method/system for transferring SAs from an old AP to a new AP upon handover before servicing the mobile terminal can be resumed at the new AP (see e.g. fig. 2, 3, transferring of SAs before payload traffic can be resumed).

The Appellant respectfully disagrees, especially with the above bolded statement. As explained in pages 9-15 of the Appeal Brief, Laurila's SA information relates to the use of security keys after device authentication has already taken place. The Examiner is referred to the detailed explanation of how authentication is achieved by Laurila, as it relates to Laurila's FIGS. 2-3 (pages 12-14 of the Appeal Brief). Again, **Laurila's security associations are only used for purposes of minimizing the need of exchanging security messages (related to encryption/decryption keys), but only after device authentication has taken place. In this regard, Laurila's authentication information is not related in any way to the initial authentication.**

The Appellant respectfully maintains that claims 1, 11, and 21 are allowable over Laurila.

B. Claims 2, 12, and 22

In response to Appellant's argument stated in pages 16-17 of the Brief on Appeal, the Examiner states the following in page 8 of the Examiner's Answer:

Applicant further argues that the prior art does not disclose storing said

initial authentication information. The examiner respectfully disagrees. Laurila does disclose storing said initial authentication information (fig. 2, 3, SA parameters are retrieved from the security association data base)

The Appellant respectfully disagrees and points out that AP_old only retrieves the SA parameters, and there is no disclosure that any initial authentication information is stored.

The Appellant respectfully maintains that claims 2, 12, and 22 are allowable over Laurila.

C. Claims 3-5, 13-15, and 23-25;

In response to Appellant's argument stated in pages 17-19 of the Brief on Appeal, the Examiner states the following in pages 8-9 of the Examiner's Answer:

Applicant further argues that the prior art does not disclose retrieving the authentication information by the second and third access points. The examiner respectfully disagrees. Laurila discloses one new AP in the figures for the sake of brevity (fig. 2, 3, one AP new). **However, more than one new APs can be applied using the same principle (col. 6 lines 41-44, fig. 1, item 38, a list of available new APs that the device can handover to). Furthermore, the claim makes no distinction between the second and third AP. Therefore, any two APs in the list 38 can satisfy second and third APs.** Therefore, it is maintained that Laurila does teach retrieving the authentication information by the second and third access points (fig. 2, SAs are retrieved by AP new using a request, fig. 1, list 38 of new APs function the same way as AP new in fig. 2)

Based on the same rationale, it is maintained (for arguments related to e.g. claim 4) that Laurila does disclose retrieving said initial authentication information by said second access point when said access device migrates from a first coverage area associated with said first access point to a second coverage area associated with said second

access point (fig. 2, 3, a handover is when the mobile terminal migrates from a first coverage area of AP_old to a second coverage area of AP_new, see col. 6 lines 52-65, col. 7 lines 46-55, changing of coverage areas when handover occurs). It is also maintained (for arguments related to e.g. claim 5) that handover from a first AP to a third AP is no difference than handover from a first AP to a second AP.

The Appellant respectfully disagrees. Even if we assume for the sake of argument that Laurila's SA is initial authentication information information (which it is not, as explained in the Appeal Brief), the above argument is still deficient. Even if "more than one new APs can be applied using the same principle" and "any two APs in the list 38 can satisfy second and third APs" (as alleged in the above bolded citation), the Examiner's argument continues to be deficient. The important aspect here is that Laurila's new AP does not perform the retrieving of the SA (instead, the SA is sent to the new AP). **Obviously, sending information from device A to device B is not the same as retrieving the information by device B.**

The Appellant respectfully maintains that claims 3-5, 13-15, and 23-25 are allowable over Laurila.

D. APPEAL BRIEF ARGUMENTS NOT ADDRESSED BY THE EXAMINER

The Appellant respectfully points out that the Examiner's Answer does not address the Appellant's arguments regarding the allowability of dependent claims 6-7, 10, 16-17, 20, 26-27, 30, and 31.

The Appellant respectfully maintains the corresponding arguments in the Appeal Brief, and that claims 6-7, 10, 16-17, 20, 26-27, 30, and 31 are allowable over Laurila.

III. Rejection of Claims 8, 18, and 28 under 35 U.S.C. § 103

The Appellant stands by the argument made in the corresponding section of the Brief on Appeal.

In response to Appellant's arguments stated in pages 27-29 of the Brief on Appeal, the Examiner states the following in pages 10-11 of the Examiner's Answer:

Applicant argues that the prior art Laurila and Bhagwat do not disclose distributing said initial authentication information to said second access point and said third access point upon said initial authenticating. The examiner respectfully disagrees.

Bhagwat discloses distributing said initial authentication information to said second access point and said third access point upon said initial authenticating (fig. 5, a centralized authentication server, col. 7 lines 34-42, col. 10 lines 14-34, **a centralized authentication server stores authentication information of a mobile device so that all backend servers (with associated access points) can retrieve the authentication information as the mobile device moves from one access point to the next**)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Laurila and Bhagwat to implement a centralized authentication server for distributing authentication information upon initial authentication in a dynamic fashion among PPP backend servers and associated access points (Bhagwat, col. 10 lines 22-26).

The Appellant respectfully disagrees. As explained in pages 27-29 of the Appeal Brief, Bhagwat only discloses retrieving of authentication information as the device moves from one AP to the next (see the above bolded language used by the Examiner). Bhagwat is silent as to distributing authentication information to at least two other

access points (e.g., a second AP and a third AP) upon initial authentication. Obviously, retrieving information by device B is different from distributing information by device A to device B.

The Appellant respectfully submits that independent claims 8, 18, and 28 are allowable.

CONCLUSION

The Appellant submits that the pending claims are allowable in all respects. Reversal of the Examiner's rejections for all the pending claims and issuance of a patent on the Application are therefore requested from the Board.

The Commissioner is hereby authorized to charge additional fee(s) or credit overpayment(s) to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

Respectfully submitted,

Date: 08-DEC-2008

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